

12-17-03

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Applicati n Numbr	09/895,008
Filing Dat	June 28, 2001
First Named Invent r	Blackburn
Group Art Unit	1724
Examiner Name	F. Prince
Attorney Docket Number	5237-000003/US

Total Number of Pages in This Submission

ENCLOSURES (check all that apply)

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Fee Transmittal Form
<input checked="" type="checkbox"/> Fee Attached
<input type="checkbox"/> Amendment / Response
<input type="checkbox"/> After Final
<input type="checkbox"/> Affidavits/declaration(s)
<input type="checkbox"/> Extension of Time Request
<input type="checkbox"/> Express Abandonment Request
<input type="checkbox"/> Information Disclosure Statement
<input type="checkbox"/> Certified Copy of Priority Document(s)
<input type="checkbox"/> Response to Missing Parts/Incomplete Application
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application)
<input type="checkbox"/> Drawing(s)
<input type="checkbox"/> Licensing-related Papers
<input type="checkbox"/> Petition
<input type="checkbox"/> Petition to Convert to a Provisional Application
<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address
<input type="checkbox"/> Terminal Disclaimer
<input type="checkbox"/> Request for Refund
<input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input checked="" type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Status Letter
<input type="checkbox"/> Other Enclosure(s) (please identify below): |
| Remarks

 | | |

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Harness, Dickey & Pierce, P.L.C.
-------------------------	----------------------------------

Signature

Date

December 15, 2003

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Director of the United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on this date: December 15, 2003

Typed or printed name	Bryan K. Wheelock
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Signature

Date

December 15, 2003

EVS 298497021 US

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**FEE TRANSMITTAL
for FY 2004**

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 165**Complete if Known**

Application Number	09/895,008
Filing Date	June 28, 2001
First Named Inventor	Blackburn, et al.
Examiner Name	Fred G. Prince
Group / Art Unit	1724
Attorney Docket No.	5237-000003/US

METHOD OF PAYMENT (check all that apply)
☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None
☐ Deposit Account:Deposit
Account
Number

08-0750

Deposit
Account
Name

Harness, Dickey & Pierce, P.L.C.

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments
☒ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.
FEE CALCULATION**1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$) 0

2. EXTRA CLAIM FEES

	Total Claims	Extra Claims	Fee from below	Fee Paid
Total Claims	20 **	0	0	0
Independent Claims	3 **	0	0	0
Multiple Dependent			0	0

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2)				(\$) 0

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee, or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	165
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$) 165

SUBMITTED BY**Complete (if applicable)**

Name (Print/Type)

Bryan K. Wheelock

Registration No. Attorney/Agent)

31,441

Telephone

314-726-7505

Signature

Date

December 15, 2003

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EV 298497021 US



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: Blackburn

Serial No.: 09/895,008

Filed: June 28, 2001

For: Advanced Thermophilic Methods and Systems for Treating Organic Materials

Examiner: F. Prince

Group Art Unit: 1724

Director of the U.S. Patent and Trademark Office
Mail Stop Appeal Brief - Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPLICANTS' BRIEF ON APPEAL

Pursuant to 37 C.F.R. § 1.192, Applicants submit their Brief on Appeal, as follows:

Real Party in Interest (37 C.F.R. § 1.192 (c)(I))

The real party in interest in this appeal is the Board of Trustees of Southern Illinois University, 1205 W. Chautauqua, Carbondale, IL 62901, by virtue of an assignment recorded January 15, 2002, at Reel 012476, Frame 0254 et seq.

Related Appeals and Interferences (37 C.F.R. §1.192(c)(2))

There are no other appeals or interferences known to Applicants, or to Applicants' legal representatives or assignees, which will directly affect, or would be directly affected by, or have a bearing on, the Board's decision in this appeal.

12/18/2003 AWONDAF1 00000060 09895008

01 FC:2402

165.00 DP

Status of the Claims (37 C.F.R. §1.192(c)(3))

Claims 22 and 23 are pending in the application. Claims 22 and 23 were finally rejected in the Office Action of May 13, 2003, and are the subject of this appeal.

Status of Amendments (37 C.F.R. §1.192(c)(4))

No amendments were filed after the final rejection of May 13, 2003.

Summary of Invention (37 C.F.R. §1.192(c)(5))

This invention relates to a method of thermophillic treatment of organic matter using a reactor through which air is circulated. In accordance with the improvements of the invention, heat generated in the reactor is used to dry treated waste by circulating fluid through the reactor to remove heat from the reactor and using this extracted heat to dry the treated organic matter. According to a second aspect of the invention, at least some of the air is recirculated through the reactor using a blower located outside of the reactor, and ammonia is removed from that portion of the air that is not recirculated, before it is released.

Issues (37 C.F.R. §1.192(c)(6))

Is the invention set forth in claim 22 non-obvious over Eby et al., U.S. Patent No. 4,040,810, in view of Wagner, U.S. Patent No. 5,302,179? Is the invention set forth in claim 23 non-obvious over Eby et al., U.S. Patent No. 4,040,810, in view of Norcross et al., U.S. Patent No. 5,587,081?

Grouping of Claims (37 C.F.R. §1.192(c)(7))

Claims 22 and 23 each stands alone.

Argument (37 C.F.R. §1.192(c)(8))

The Invention of Claim 22 Would Not Have Been Obvious from Eby et al., U.S. Patent No. 4,040,810, in view of Wagner, U.S. Patent No. 5,302,179

The final rejection concedes that “Eby et al do not disclose passing a fluid through the reactor to dry organic matter”. Office Action of May 13, 2003, page 3. However, the Office Action asserts that Wagner discloses receiving heat from a fluid in order to dry sludge to ultimately produce a useful process. Office Action of May 13, 2003, page 3. However the clear teaching from Wagner et al. is that energy must be input into the processing system. There is no teaching in either Eby et al. or Wagner et al., of generating the heat to dry treated sludge from the very process that treats the sludge. It is not at all obvious from these patents to create a system that both treats organic material, and dries the resulting treated organic material, without significant energy input. Applicant’s invention greatly improves the economics of properly treating animal wastes and other organic matter. For at least this reason, applicant respectfully submits that the method set forth in claim 1 would not be obvious from Eby et al. and Wagner et al, and that the rejection of claim 1 should be reversed.

The Invention of Claim 22 Would Not Have Been Obvious from Eby et al., U.S. Patent No. 4,040,810, in view of Norcross et al., U.S. Patent No. 5,587,081

The final rejection concedes that “Eby et al do not disclose releasing the gas to the atmosphere”. Office Action of May 13, 2003, page 3. However, the Office Action asserts that “Norcross et al. discloses releasing a portion of the gas in an reactor in order to avoid overpressurising the reactor.” However Eby et al. and Norcross do not teach or suggest a thermophilic treatment system in which part of the air is recirculated and part of the air is released, where ammonia is removed from the air prior to its release. This is simply not shown or suggested in the references, and therefore cannot be obvious from them. For at least this reason, applicant respectfully submits that the method set forth in claim 1 would not be obvious from Eby et al. and Norcross et al., and that the rejection of claim 1 should be reversed.

Conclusion

The apparatus claimed in claims 22 and 23 would not have been obvious from the cited references, and therefore the rejection of claims 22 and 23 should be reversed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Bryan K. Wheelock". The signature is fluid and cursive, with the first name "Bryan" and last name "Wheelock" clearly distinguishable.

Bryan K. Wheelock, Reg. No. 31,441
Harness, Dickey & Pierce, P.L.C.
7700 Bonhomme Avenue, Suite 400
St. Louis, MO 63105
(314) 726-7500

APPENDIX OF THE CLAIMS ON APPEAL

22. A method for aerobic thermophilic treatment of organic matter comprising passing air through organic matter in a closed reactor, recycling a portion of the air that has passed through the organic matter back through the organic matter in the reactor, removing ammonia from remaining air that has passed through the organic matter and releasing it from the reactor; and circulating a fluid through the reactor to remove heat therefrom, and using the heat to dry treated organic matter removed from the reactor.

23. A system for the aerobic thermophilic treatment of organic material, the system comprising a reactor for containing the organic material; an aeration system for passing air through the organic material contained in the reactor, and a recirculation system for capturing at least a portion of the air that has passed through the organic material, the recirculation system including a blower located outside of the reactor; and recycling it to the aeration system; and a system for removing ammonia from the air that has passed through the organic material before releasing it to the atmosphere.



CERTIFICATE OF MAILING

I certify that on December 15, 2003 APPLICANTS' BRIEF ON APPEAL (in triplicate) was sent by Express Mail Label No. EV 298497021 US to the U.S. Patent and Trademark Office, address to Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Bryan K. Wheelock
Reg. No. 31,441



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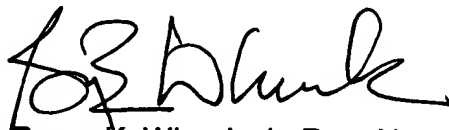
The Invention of Claim 22 Would Not Have Been Obvious from Eby et al., U.S. Patent No. 4,040,810, in view of Norcross et al., U.S. Patent No. 5,587,081

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Bryan K. Wheelock
Reg. No. 31,441